

1 Q. And what did Ripple do to make sure  
2 there were high-quality exchanges for XRP trading?

3 A. So for -- to ensure that there were  
4 high-quality exchanges as part of the ODL and  
5 xRapid experience, there were a number of things  
6 that we did. Number one, site visits were  
7 important. So understanding if the exchange was  
8 run by high-quality, high-integrity people.

9 Did they have -- you know, we did a  
10 security audit. Did they have the right security  
11 protocols?

12 Did they have reputable funders so that  
13 they had a long runway? Because when you're  
14 building in crypto, it takes a long time for  
15 products to mature and you need to have ample  
16 runway given you're in a very nascent, you know,  
17 industry.

18 Did they have the right APIs?

19 So exchanging digital currencies is  
20 different than processing -- sorry. Exchanging  
21 currencies is -- is one part of what an exchange  
22 does, but when they're part of the ODL and xRapid  
23 experience, they also have to process KYC rules.

24 Q. That's know your customer?

25 A. Know your customer. They need to adhere

1 to the travel rule. And that additional metadata  
2 needs to be available and processed through the  
3 exchange.

4 So most exchanges that we met with  
5 didn't have the right kinds of parameters and  
6 metadata to not only do cryptocurrency trading  
7 against fiat, but also payment use cases like the  
8 ones that ODL offers.

9 Q. Was it easy for Ripple to find these  
10 high-quality exchanges or did it involve a lot of  
11 hard work?

12 MS. ZORNBERG: Object to form.

13 You can answer.

14 A. Well, in my experience with product over  
15 the years, nothing is really easy. It's super  
16 complicated to -- to launch products and achieve  
17 product market fit given you need to be ten times  
18 better than anything else out there.

19 Now, you -- you couple on being in the  
20 crypto industry that is still very nascent and new  
21 and that adds further complication. And then you  
22 add on the global nature of our business and the  
23 unfamiliarity with local markets and participants  
24 and that adds an additional layer of complexity  
25 into building a product.

1           And not only at a new industry, but also  
2           at a -- a company offering a newer product to the  
3           market.

4           Q.    In that first paragraph of AB-20 (sic),  
5           you refer to a "retail speculator."

6                   What do you mean by the term "retail  
7           speculator"?

8           A.    I'm comparing the two types of liquidity  
9           providers --

10          Q.    Oh, I'm sorry. Can -- I need to clear  
11          that up. I misspoke.

12                   In AB -- Exhibit AB-42, you use the  
13          terminology "retail speculator." Please give your  
14          understanding of -- of what you meant there by  
15          "retail speculator."

16          A.    So I have versus, "vs," institutional  
17          liquidity providers.

18                   So as I mentioned, on an exchange there  
19          are two types of liquidity providers: One that  
20          are institutional grade and, in many destination  
21          markets, due to the lack of liquidity, our --  
22          Ripple-contracted market makers and then everyone  
23          else. And a general catchall is known as natural  
24          liquidity or in this case I used -- I think I'm  
25          actually referring to another portion in the

1 document, someone else's language, but speculative  
2 liquidity.

3 Q. Is there a difference between retail  
4 speculators and institutional speculators as you  
5 understand it?

6 A. I don't believe I -- I used the -- the  
7 word "institutional speculators," so I'm not  
8 familiar with that -- that term.

9 Q. Would you consider the term "retail  
10 speculator" to apply to a hedge fund?

11 A. I don't know for certain.

12 MR. HANAUER: Okay. Exhibit 50,  
13 please. I'm going to do this last one.  
14 It's quick. Actually, before you --

15 Q. I'm just going to ask you a couple  
16 questions before the exhibit.

17 In 2020, did Ripple promote the  
18 narrative that XRP should be part of a diversified  
19 investment portfolio?

20 MR. HECKER: Objection to the  
21 form of the question.

22 A. In my function -- sorry, can you give me  
23 the date again?

24 Q. In 2020.

25 A. In my role both as head of product and



1 general manager of RippleNet, that wouldn't be in  
2 my purview and function.

3 Q. Were you ever aware of Ripple promoting  
4 XRP -- promoting that XRP should be part of the  
5 diversified investment portfolio?

6 MS. ZORNBERG: Objection to form  
7 and to the use of the term "promoting."

8 A. I do not recall.

9 Q. Did Ripple ever promote XRP as an -- as  
10 an investment product?

11 MS. ZORNBERG: Same objections.

12 A. I do not recall.

13 Q. Did Ripple ever make public statements  
14 suggesting that XRP should be part of a  
15 diversified investment portfolio?

16 A. Can you rephrase the question, please?

17 Q. Did Ripple ever make statements to the  
18 public suggesting that XRP should be part of a  
19 diversified investment portfolio?

20 A. I do not recall.

21 Q. Did Ripple ever make statements to the  
22 public suggesting that XRP should be an investment  
23 product?

24 A. I do not recall.

25 MR. HANAUER: Exhibit 50, please.

(Whereupon, exhibit is presented  
and marked SEC Birla Exhibit AB-50 for  
identification.)

MR. HANAUER: And I just tendered  
the witness Exhibit -- a document labeled  
Exhibit AB-50, which ends in a Bates  
number -- or begins with a Bates number  
ending in 5553.

BY MR. HANAUER:

Q. And is Exhibit AB-50 an e-mail that  
sent to you and others on July 3rd, 2020?

A. Yes.

Q. And do you see how writes about  
two-thirds of the way down, "We are about to get  
active with the narrative that XRP deserves to be  
a meaningful participant to a diversified  
portfolio"?

A. I see that.

Q. And does that refresh your recollection  
of whether Ripple ever promoted XRP as an  
investment product?

MR. HECKER: Objection to form;  
foundation.

A. No, I don't believe so.

Q. And what was role with Ripple

1 in July 2020?

2 A. Her role was unclear to me. Is unclear  
3 to me.

4 Q. Was she high-ranking at Ripple?

5 MR. HECKER: Objection to form.

6 A. I don't recall her official title, nor  
7 do I recall her being part of core -- core  
8 decisions.

9 Q. Do you have an understanding of why  
10 [REDACTED] would be attaching an XRP Markets Weekly  
11 presentation to her e-mail?

12 A. I do not.

13 MR. HANAUER: Counsel, do you  
14 think now is a good time for a break?

15 MR. HECKER: That would be great.  
16 Thank you.

17 MR. HANAUER: Yeah, let's go off.

18 MR. TENREIRO: Are we done with  
19 this one?

20 MR. HANAUER: Yes, thank you.

21 THE VIDEOGRAPHER: The time on  
22 the video monitor is now 3:21 -- 3:22 p.m.  
23 This is the end of Media Unit Number 4.  
24 Going off the video record.

25 (Whereupon, a recess is taken.)

1 THE VIDEOGRAPHER: The time on  
2 the video monitor is now 3:46 p.m. This  
3 is the start of Media Unit Number 5. We  
4 are back on the video record.

5 BY MR. HANAUER:

6 Q. Mr. Birla, since you started at Ripple,  
7 has Ripple provided incentives to market  
8 participants to increase trading in XRP?

9 MS. ZORNBERG: Object to form.

10 A. I believe -- I don't know the mechanics  
11 of the deal, but where there was insufficient  
12 liquidity for the xRapid and ODL experience,  
13 especially at destination exchanges, we would  
14 contract with market makers to help supplement the  
15 liquidity between delta for what a customer wanted  
16 to send and what was available through natural  
17 liquidity at an exchange.

18 Q. Any other way that Ripple incentivized  
19 market participants to increase trading in XRP?

20 MS. ZORNBERG: Same objection to  
21 form.

22 A. What would your definition of "market  
23 participants" be?

24 Q. So how about this? Before xRapid  
25 launched in 2018, did Ripple provide incentives to

1 market participants to increase trading in XRP?

2 MS. ZORNBERG: Objection to form.

3 A. I don't know for certain.

4 Q. Well, you -- you had mentioned the  
5 giveaways, right, when Ripple was giving away XRP?

6 A. I believe I mentioned I was familiar  
7 with XRP giveaways.

8 Q. And Ripple has sold XRP to institutional  
9 traders at discounted prices?

10 MS. ZORNBERG: Is that a question  
11 or are you assuming facts not in evidence?

12 MR. HANAUER: It's a question.

13 A. Can you rephrase the question, please?

14 Q. Has Ripple sold XRP to institutional  
15 traders at discounted prices?

16 A. I don't know for certain.

17 Q. Has Ripple paid exchanges to list XRP on  
18 their exchange?

19 A. Not to my knowledge.

20 Q. Has Ripple offered incentives to money  
21 transmitters to use Ripple products?

22 A. I believe so.

23 Q. Tell me about that.

24 A. As -- as a product is early on in its  
25 development life cycle, like the ones ODL and



1 xRapid, for example, and in a very nascent  
2 ecosystem, like blockchain and crypto,  
3 cryptocurrency, or the cryptocurrency ecosystem, I  
4 mentioned earlier that, you know, the products  
5 have, you know, user experience issues given to  
6 the nascent infrastructure providers, crypto  
7 exchanges and so forth.

8 And to get product experience and  
9 feedback from customers early on, it's super  
10 important in a product development life cycle.  
11 And my internal saying is Day 1 of a product isn't  
12 when it's on a piece of paper or in a  
13 presentation, but, like, when a customer starts  
14 using it. And there are oftentimes when we are  
15 trying to get very early feedback from customers  
16 and we quite well know that the experience isn't  
17 where it needs to be. And in those days, in -- in  
18 some cases, it's worthwhile to provide incentives  
19 to a customer.

20 Q. Does Ripple still provide incentives to  
21 its money transmitter customers?

22 A. As the product has been in the market  
23 and we've improved experience, to my knowledge, as  
24 a product has gotten better and better, as a  
25 result, while we do pay incentives in certain

1 cases, the amount has reduced to coincide with the  
2 improvements in the -- in the product experience.

3 Q. So what you're saying is the amount of  
4 incentives that Ripple pays its money transmitter  
5 customers has reduced over time?

6 MR. HECKER: Objection;  
7 mischaracterizes his testimony.

8 A. I believe that for certain customers  
9 into certain corridors where the product  
10 experience has improved over time, the amount of  
11 incentives has -- has reduced.

12 Q. Is Ripple still contracting with market  
13 makers to increase trading in XRP?

14 A. I don't know for certain, but in a  
15 number of our corridors, I believe that -- as I  
16 defined earlier, that the -- the delta between the  
17 amount customers want to send and what's there via  
18 natural liquidity, that delta has shortened in  
19 some corridors as the product has matured, but  
20 also as the cryptocurrency ecosystem has matured  
21 more broadly.

22 And as a result, in certain corridors,  
23 the contracted market makers have been reduced.

24 Q. Is Ripple still employing market makers  
25 on Mexican digital exchanges?

1 MR. HECKER: Objection to form.

2 A. At this very moment, I don't know for  
3 certain whether there are active market makers  
4 at -- at the exchange in Mexico.

5 Q. Is Ripple still employing market makers  
6 on Filipino exchanges?

7 MR. HECKER: Same objection.

8 A. At this very moment, I don't know for  
9 certain if there are market makers at the Filipino  
10 exchange.

11 Q. Who would be the best person in Ripple  
12 to ask about whether Ripple is still paying money  
13 makers in destination countries?

14 A. You --

15 MS. ZORNBERG: Objection. You  
16 said "money makers."

17 MR. HANAUER: Oh, I'm -- I'm  
18 sorry.

19 MS. ZORNBERG: The court reporter  
20 --

21 MR. HECKER: The court reporter  
22 fixed it for you.

23 MS. ZORNBERG: The court reporter  
24 -- the court reporter --

25 MR. HANAUER: Well, I'll just ask

1           it again. Thank you, Counsel.

2       BY MR. HANAUER:

3           Q. Who would be the best person at Ripple  
4       to ask about whether Ripple is still paying market  
5       makers in destination countries?

6           A. Well, to clarify, in certain destination  
7       countries at certain exchanges -- and there's a  
8       function at Ripple known as a markets team that  
9       has the most up-to-date knowledge on -- on that  
10      question.

11          Q. Who runs the market team right now?  
12      Markets team.

13          A. I don't know for certain, but I believe  
14      it's [REDACTED]

15                 MR. HANAUER: Ex -- we're going  
16      to go to Exhibit 37.

17                 (Whereupon, exhibit is presented  
18      and marked SEC Birla Exhibit AB-37 for  
19      identification.)

20                 MR. HANAUER: And I just tendered  
21      the witness a document labeled Exhibit  
22      AB-37 that begins with a Bates number  
23      ending in 0714.

24       BY MR. HANAUER:

25          Q. And, Mr. Birla, Exhibit AB-37, that's an

1 e-mail that you sent to your subordinates on --  
2 certain of your subordinates on July 23rd, 2019?

3 A. I believe that's correct, yes.

4 Q. You sent this e-mail to the product  
5 managers working for you?

6 A. Yes, I believe that's correct.

7 Q. What is an OKR?

8 A. An OKR is a type of goal that stands for  
9 objective, is the O, and the KR is key result.

10 Q. And do you see the -- the second section  
11 of your e-mail, the one titled "OKRs/High-Level Q3  
12 priorities"?

13 A. I do.

14 Q. And you wrote "We have our Q3 company  
15 OKRs and the Top 5 priorities that we will be  
16 tracking this quarter"?

17 A. I see that.

18 Q. And you write that there are "additional  
19 areas of focus we should be covering"?

20 A. I see that.

21 Q. And the second bullet point is "XRP  
22 stewardship" and then in the parenthetical  
23 "(trust, liquidity, price, et cetera)"?

24 A. I see that.

25 Q. What did you mean by "XRP stewardship"?



1           A.    I don't know for certain, but in looking  
2           through this, I believe these are copied notes  
3           pasted into an e-mail.

4           Q.    And I'm not asking about the more  
5           technical stuff later in the e-mail.

6                     But what -- what's your understanding of  
7           XRP stewardship as you were trying to convey that  
8           to your subordinates?

9           A.    QB -- the subject to my knowledge is --  
10           is QBR, quarterly business review. That's  
11           conducted at the Ripple leadership level. And I  
12           believe that here I've copied the notes that  
13           someone else created and pasted it into this  
14           e-mail and may have edited it here and there and  
15           then sent it out to my team.

16           Q.    What's your understanding of the term  
17           "XRP stewardship"?

18           A.    In the context of my team, it would be  
19           the liquidity portion and ensuring that there is  
20           liquidity at the exchanges that are leveraged by  
21           ODL and xRapid.

22           Q.    What do you understand XRP stewardship  
23           to mean in terms of price?

24           A.    I do not understand that to my  
25           knowledge.

1 Q. Is Ripple able to take actions that  
2 affect the price of XRP?

3 MR. HECKER: Object to the form  
4 of the question.

5 A. To my knowledge, no.

6 Q. Can Ripple affect XRP's price by buying  
7 or selling large amounts of XRP?

8 MS. ZORNBERG: Objection; asked  
9 and answered.

10 A. I do not know for certain.

11 Q. Do you have any understanding of whether  
12 Ripple could do that?

13 MS. ZORNBERG: Objection; asked  
14 and answered.

15 A. I do not understand.

16 Q. When you sent the e-mail in Exhibit  
17 AB-37 to your team, were you trying to convey to  
18 your product -- product managers to be good  
19 stewards of XRP?

20 MS. ZORNBERG: Object to form.

21 A. I don't believe so, no.

22 Q. Would you have wanted your product  
23 managers to be poor stewards of XRP?

24 MS. ZORNBERG: Objection to form.

25 A. I'm not sure what "poor stewards of XRP"

1 means, so no.

2 Q. Do you understand what to mean -- to be  
3 a steward of XRP is?

4 MS. ZORNBERG: Objection.

5 A. In the context of -- in the context of  
6 my products, that would -- and my product team,  
7 that would mean to ensure there were -- there was  
8 sufficient liquidity in the corridors that xRapid  
9 had as part of its product experience.

10 Q. In terms of the area of your focus,  
11 would Ripple personnel be poor stewards of XRP  
12 liquidity if they took efforts to lessen the  
13 liquidity of XRP?

14 MS. ZORNBERG: Object to form.

15 A. Can you rephrase the question, please?

16 Q. So I -- I was asking earlier what it  
17 meant to be a good steward of XRP liquidity and  
18 you answered the way you did. I'm just trying to  
19 figure out what the opposite of that would have  
20 looked like.

21 A. The opposite. So in the context of  
22 product and xRapid and ODL, if the customer wanted  
23 to send a million dollars from the U.S. to Mexico  
24 or Europe to the Philippines, there needs to be  
25 one million plus of liquidity against XRP in both

1 the sending and receiving exchange. I'm not  
2 sure -- so you need to have sufficient liquidity  
3 more than what a customer wants to send. I'm not  
4 sure how you would lessen the liquidity to answer  
5 your question.

6 Q. Could Ripple cancel its contract with  
7 market makers?

8 MS. ZORNBERG: Objection to form;  
9 speculative.

10 A. That -- I believe so.

11 Q. In 2017, did Ripple decide to place a  
12 large amount of its XRP holdings into escrow?

13 A. I don't recall the exact dates, but at  
14 some portion, Ripple put a large portion of its  
15 XRP in escrow to my knowledge.

16 Q. And why did Ripple do that?

17 A. I don't -- to my knowledge, I don't have  
18 the context of all the reasons. My involvement  
19 was around the technical details needed to escrow  
20 and manage the release process from a product  
21 and -- and technical perspective.

22 Q. And why did Ripple want to do that?

23 A. Again, in -- in my role, my input and  
24 involvement was around providing, like, the -- the  
25 product capabilities and feature sets needed to

1 manage the escrow process and -- and -- and lock  
2 up other remaining portions that weren't used at  
3 each -- at the end of each month.

4 Q. Did you ever ask anyone at Ripple why  
5 you were being directed -- directed to figure out  
6 a process to escrow XRP?

7 MR. HECKER: Objection to form.

8 A. By the time that I was involved, I had  
9 seen the decision was largely made, and my  
10 involvement was to figure out how to get the  
11 product portion done.

12 Q. Was the decision to escrow Ripple's XRP  
13 holdings influenced by concerns for market  
14 participants that Ripple could lower the price of  
15 XRP by flooding the market with its XRP holdings?

16 MR. HECKER: Objection to form.

17 A. I am -- I am not aware of the inputs  
18 that went into the decision and factors that went  
19 into the decision to escrow. My role was to  
20 provide the product feature set to manage the  
21 escrow process and lock up the unused portions on  
22 a monthly basis from a product and process  
23 perspective.

24 Q. What would be the business purpose for  
25 Ripple to escrow its XRP holdings?



1 MS. ZORNBERG: Object to form.

2 A. I don't know for certain.

3 MR. HANAUER: Twenty-one.

4 (Whereupon, exhibit is presented  
5 and marked SEC Birla Exhibit AB-21 for  
6 identification.)

7 MR. TENREIRO: Twenty-one.

8 MR. HANAUER: I just tendered the  
9 witness a document labeled Exhibit AB-21,  
10 which begins with the Bates number ending  
11 in 1435.

12 BY MR. HANAUER:

13 Q. Is Exhibit AB-21 an e-mail you received  
14 on May 3rd, 2017?

15 A. I believe so.

16 Q. And do you see the second e-mail in the  
17 chain is an e-mail from Mr. -- second e-mail from  
18 the top of the chain on the first page is an  
19 e-mail from Mr. Griffin dated May 3rd, 2017?

20 A. I see that.

21 Q. And do you see how the bullet points  
22 discuss potential terms for Ripple's escrow  
23 arrangement?

24 A. I see -- yeah, I see an outline proposal  
25 for the 55 billion escrow and one billion per

1 month.

2 Q. And did Ripple ultimately settle on  
3 those terms?

4 A. I am not sure about -- if you're  
5 referring to the first bullet, I believe so, yes.

6 Q. And so when it says "55B rolling escrow,  
7 1B per month," does that mean that 55 billion XRP  
8 are placed into escrow and XRP [sic] is allowed to  
9 disburse 1 billion XRP per month from that escrow  
10 account?

11 MS. ZORNBERG: Object to form.

12 You said does it mean that XRP is allowed  
13 to disburse one billion XRP?

14 MR. HANAUER: Thank you, Counsel.

15 I'll rephrase that.

16 BY MR. HANAUER:

17 Q. Does it mean -- the -- the "55B rolling  
18 escrow, 1B per month," does that mean that Ripple  
19 would place 55 billion in -- XRP into escrow and  
20 that Ripple could release no more than 1 billion  
21 XRP per month?

22 A. I -- I don't know for certain, but I  
23 believe that's accurate.

24 Q. And then do you see in  
25 Mr. Garlinghouse's e-mail immediately above that,

1 he writes "My point here is that you are showing  
2 some math below on set-asides that we didn't  
3 'decide' on. We are simply making the point that  
4 anything not escrowed will be used to continue to  
5 invest in the health of the XRP ecosystem. And  
6 the Asheesh clause was that 'invest' means a  
7 handful of things which I won't be prescriptive  
8 about here"?

9 A. I see that.

10 Q. What did you understand Mr. Garlinghouse  
11 to be referring to when he talks about anything  
12 not escrowed will be used to invest in the health  
13 of the XRP ecosystem?

14 A. I don't know for certain.

15 Q. Did you understand that he was referring  
16 to that the XRP not escrowed could be continued to  
17 be sold to fund XRP's -- Ripple's operations?

18 MS. ZORNBERG: Object to form.

19 MR. SOLOMON: Objection. Asked  
20 and answered. He said "I don't know for  
21 certain" to your last question.

22 A. I don't know for certain.

23 MR. HANAUER: Mr. Solomon, I  
24 would ask that you please stop with the  
25 speaking objections. This is not the

1 first time.

2 MR. SOLOMON: I'm trying to  
3 identify. You just asked the same  
4 question twice. So I'll say "objection,"  
5 but if you persist in the questioning,  
6 I'll point out why I'm objecting.

7 MR. HANAUER: I would think  
8 "asked and answered" could -- would  
9 suffice.

10 BY MR. HANAUER:

11 Q. What's your understanding of the  
12 "Asheesh clause" that Mr. Garlinghouse is  
13 referencing?

14 A. I don't believe it was attached to the  
15 e-mail referring to the "Asheesh clause." So I  
16 don't -- I don't recall.

17 MR. HANAUER: Twenty-three.

18 (Whereupon, exhibit is presented  
19 and marked SEC Birla Exhibit AB-23 for  
20 identification.)

21 MR. TENREIRO: Twenty-three,  
22 Nicole.

23 MR. HANAUER: And I just tendered  
24 the witness a document labeled Exhibit  
25 AB-23, which bears a Bates number ending

1 in 6664.

2 BY MR. HANAUER:

3 Q. And, Mr. Birla, is Exhibit AB-23 an  
4 e-mail that Mr. Garlinghouse sent to Monica Long,  
5 copying you, dated November 27th, 2017?

6 There's a pending question, sir.

7 A. Oh, sorry. Do you mind repeating the  
8 question?

9 Q. Yeah, yeah. Exhibit AB-23, that's an  
10 e-mail that you received on November 27th, 2017?

11 A. Yes, I believe so.

12 Q. And do you see how the -- the e-mail and  
13 the -- the one below it in the chain references an  
14 escrow announcement?

15 A. Referring to the one dated November 27,  
16 2017?

17 Q. Yes. I believe both e-mails bear that  
18 date.

19 A. Yes, I see it.

20 Q. And was late November 2017, is that  
21 around the time that Ripple was planning to  
22 publicly announce the escrow program it was  
23 implementing?

24 A. I don't know for certain other than the  
25 contents of this e-mail.



1 Q. Do you see how Ms. Long writes with the  
2 first bullet point "Objective is to create a  
3 second wave of excitement about the lockup amongst  
4 speculators"?

5 A. I see the bullet, first bullet, yes.

6 Q. And what did you understand Ms. Long to  
7 mean about creating a second wave of excitement  
8 about the lockup amongst speculators?

9 A. I don't remember. I don't recall  
10 reading the e-mail or interpreting the e-mail as  
11 at this time I was busy, from my recollection,  
12 implementing the software features needed to  
13 support the lockup.

14 Q. Why would making announce -- why would  
15 Ripple making an announcement about putting its  
16 XRP holdings into escrow, why would that generate  
17 excitement amongst speculators?

18 A. I don't know for certain.

19 Q. And is it your testimony that when  
20 Ripple referred to "speculators," it didn't know  
21 who those people were?

22 MS. ZORNBERG: Object to form.

23 A. In -- in the context of product, in the  
24 products that I worked on, at exchanges there are  
25 two types of liquidity: There's the Ripple

1       contracted liquidity and then the unknown. And  
2       the unknown was referred to as -- as natural  
3       liquidity on those exchanges.

4               In my role, I was primarily concerned  
5       with exchanges that were part of the product  
6       experience to support ODL and xRapid.

7               Q.    So what you just said -- you said  
8       "speculators" was your terminology for natural  
9       liquidity on exchanges, is that accurate?

10              A.    I believe it's the other way around. My  
11       terminology was "natural liquidity."

12              Q.    Natural liquidity equals speculators?

13              A.    In -- in the context of my products, the  
14       unknown liquidity that was not contracted by  
15       market makers to support the -- the product was  
16       known as natural liquidity. Just the unknown.

17              Q.    Okay. So speculators equals natural  
18       liquidity equals unknown liquidity? Do I have  
19       that right?

20                   MR. HECKER: Objection to form.

21                   MS. ZORNBERG: Objection.

22                   MR. HECKER: Mischaracterizes his  
23       testimony.

24              A.    The -- the -- what I referred to as the  
25       unknown or the noncontracted liquidity on

1 exchanges to support Ripple products is natural  
2 liquidity.

3 Q. Okay. And I'm asking you about the term  
4 "speculators."

5 When you use that term, are you  
6 referring to unknown liquidity on exchanges?

7 A. I --

8 MS. ZORNBERG: Hold on one sec.

9 Objection. Are you referring at  
10 all still to this exhibit? Because he  
11 didn't use the term "speculators" in  
12 this.

13 MR. HANAUER: Right. I'm  
14 actually trying to get a better sense of  
15 what he means by -- when -- what the term  
16 "speculators" means to the witness.

17 MS. ZORNBERG: Objection; asked  
18 and answered.

19 A. I don't use the term "speculators"  
20 often. I use the term for unknown liquidity  
21 participants as -- as "natural liquidity"  
22 providers.

23 Q. Okay. When you do use the term  
24 "speculators," what are you referring to?

25 MS. ZORNBERG: Objection.

1           A.    To my knowledge, I rarely use the term  
2    "speculators."  If I do, it's likely quoting  
3    someone to my knowledge from another portion of a  
4    document or an e-mail.  But in that context, it's  
5    likely to be similar to my definition of natural  
6    liquidity.

7           Q.    And your definition of natural liquidity  
8    is unknown liquidity?

9                   MS. ZORNBERG:  Objection; asked  
10           and answered.

11          A.    My definition of natural liquidity --  
12    there's a sending exchange and a receiving  
13    exchange that is part of the ODL and xRapid  
14    product infrastructure.  The amount a customer  
15    wants to send, subtract the natural liquidity --  
16    the amount a customer wants to send, subtract the  
17    contracted, you know, liquidity, and that's what's  
18    remaining as -- is known as the natural liquidity  
19    portion.

20          Q.    Do you have an understanding of whether  
21    other people at Ripple had the same definition of  
22    speculators as you did?

23          A.    I believe so, yes.

24          Q.    Who else at Ripple shared your  
25    definition of speculators?

1           A.    Well, my team, product team, I talked to  
2   them about -- I believe I talked to my team about  
3   my definition of natural liquidity and as it  
4   relates to xRapid and ODL products.

5           Q.    What about people outside of your team?  
6   Did you understand the folks outside of your team  
7   to share your understanding of the term  
8   "speculators"?

9           A.    As it related to Ripple products, you  
10   know, folks outside of my team, I believe, adopted  
11   my terminology for natural liquidity and  
12   measurement of natural liquidity. And Ripple  
13   contracted liquidity to support ODL and xRapid  
14   products.

15          Q.    I'm asking you about your definition of  
16   speculator, not natural liquidity.

17          A.    I -- I don't know for certain.

18          Q.    How could Ripple generate excitement  
19   about its escrow program amongst speculators if  
20   Ripple didn't know who the speculators were?

21                   MS. ZORNBERG:  Objection.

22          A.    Do you mind rephrasing the question?

23          Q.    So I -- we just talked about that under  
24   your definition, speculators were unknown  
25   liquidity, right?



1 A. (Indicating)

2 MS. ZORNBERG: Objection; asked  
3 and answered.

4 Q. You have to say yes.

5 A. Yes, my definition of natural liquidity  
6 is unknown liquidity that supports xRapid and ODL  
7 products.

8 Q. Okay. And that definition applies to  
9 speculators also, right?

10 MS. ZORNBERG: Objection; asked  
11 and answered.

12 A. Speculators that are providing natural  
13 liquidity at exchanges that support ODL and xRapid  
14 products.

15 Q. So how can Ripple try and generate  
16 excitement amongst speculators if it doesn't know  
17 what sort of folks those speculators are?

18 MS. ZORNBERG: Objection.

19 A. In my role as -- as product, that is not  
20 a function that I work on.

21 Q. So Ripple's first xRapid customer began  
22 using xRapid in October 2018?

23 A. There were a number of early versions of  
24 what is known as ODL or xRapid, RPP being one of  
25 them. And so, you know, early -- early customers

1 that date back to R -- the RPP days.

2 Q. And when were the RPP days?

3 A. I don't know for certain, but I believe  
4 around the 2014 time frame.

5 Q. And the first xRapid customer started  
6 using xRapid in October 2018?

7 A. I don't know for certain the exact  
8 dates, but I believe them to be around 2018.

9 Q. Late 2018?

10 MS. ZORNBERG: Object to form.

11 A. I don't know for certain, but in 2018.  
12 I believe that time range is in the general  
13 ballpark.

14 Q. Did Ripple -- before xRapid launched,  
15 did Ripple sell XRP to people using RPP?

16 A. I don't believe so, no.

17 Q. So when xRapid customers started using  
18 xRapid -- and I'm referring to the xRapid product  
19 that you just said launched in 2018, not its  
20 predecessors. Okay?

21 A. I understand this.

22 Q. Okay. So when xRapid customers started  
23 using xRapid in 2018, how did Ripple generate  
24 revenue from xRapid?

25 A. I've been working in product and

1 engineering in Silicon Valley for most of my  
2 career, and both on the early product development  
3 side, late-stage side, as well. And it's -- a  
4 core tenet of being a good product manager is to  
5 start with solving a customer experience problem.  
6 And we have a saying that you can't be marginally  
7 better than your customers. You have to be 10x  
8 better than your customer.

9 And I've created internet products, I've  
10 created desktop products. And that same mantra  
11 holds true. Creating something that's 10X better  
12 in the crypto nascent industry is even harder  
13 given a lot of your exchange partners and new  
14 construction partners are also very nascent and  
15 building at the same time. The analogy we use is  
16 it's sort of like, you know, changing out the  
17 engine of a flight, you know, halfway through a  
18 flight given there's so much changing around it.

19 And so we were fixated on creating a  
20 reliable 10X better experience for our products  
21 despite leveraging very nascent infrastructure  
22 because our customers told us that that mattered.  
23 They didn't really care if the underlying  
24 infrastructure was nascent. They wanted a  
25 reliable, dependable experience to move mission

1 critical funds for their -- on behalf of their  
2 customers.

3 And so as a result, that's what my  
4 product team -- that's what I had my product team  
5 and my engineering team focused on and continued  
6 to focus on at Ripple.

7 Q. Okay. But I was asking you when xRapid  
8 launched in 2018, how did Ripple generate revenues  
9 from that product?

10 A. To my knowledge, my team was focused  
11 on -- was not focused on generating profits or  
12 revenue from the product. Was focused on creating  
13 a 10x better experience for our customers. And  
14 there were a lot of complications given the  
15 nascent infrastructure that supported the -- the  
16 product.

17 Q. Okay. When Ripple's first customers  
18 began using XRP in -- or xRapid in 2018, was  
19 Ripple generating revenues from those customers'  
20 use of xRapid?

21 A. That wasn't a focus, so I don't believe  
22 so.

23 Q. Is there a time that Ripple began  
24 generating revenues from xRapid or ODL?

25 A. I don't know the exact dates, but over a

1 period of time, different types of business models  
2 became clear to us and -- and -- and started to  
3 generate what's known as top line revenue.

4 Q. Okay. Tell me about that. How did  
5 Ripple first start generating top line revenue  
6 using xRapid or ODL?

7 A. So we worked a lot with our -- our  
8 customers to figure out what kinds of problems  
9 they were having in their day-to-day. And -- and  
10 so that was one sort of input.

11 The second input was that the crypto  
12 markets continued to mature. We talked earlier  
13 about the depth of liquidity. The depth of  
14 liquidity matured quite a bit as the entire crypto  
15 ecosystem grew.

16 And analyzing that, there were a few  
17 different types of opportunities. Number one, XRP  
18 for use -- in selling XRP for our customers for  
19 use in the ODL or xRapid product.

20 The second one would be a line of credit  
21 and charging interest on a line of credit for our  
22 customers to -- to use.

23 And then the third one was around what's  
24 known as FX. And in certain cases where -- in  
25 certain cases in certain corridors, we're seeing



1     there's ability for our products to generate FX  
2     top line revenue. And that has been aided by the  
3     growth and the depth of liquidity in certain  
4     markets.

5           Q.    So it's my understanding that the first  
6     step in an xRapid or ODL transaction is the money  
7     transmitter needs to convert dollars to XRP,  
8     correct?

9           A.    To my knowledge, it depends on what --  
10    the originating currency, location of the  
11    customer. So if the customer is starting with  
12    U.S. dollars, then that is accurate. The first  
13    step is to convert U.S. dollars into XRP. If the  
14    customer is starting with Euros, then it's Euros  
15    to XRP. If the customer is starting with GBP,  
16    it's GBP to XRP, and so forth.

17          Q.    Okay. So that -- that's Step 1. And  
18    then the next -- Step 2 is in the receiving  
19    market. The money transmitter needs to convert  
20    the XRP to the receiving currency?

21          A.    Well, there's a few steps in between.  
22    Once the customer, the money transmitter,  
23    leverages a sending exchange to convert from U.S.  
24    dollars to XRP, the system withdraws the XRP from  
25    the sending exchange. And through the

1 decentralized XRPL technology moves from one  
2 account to the receiving exchange's account on the  
3 XRP ledger.

4 And then it is then deposited to the  
5 receiving exchange -- the XRP is deposited into  
6 the receiving exchange. And then from there it is  
7 converted into pesos and then from there it's  
8 withdrawn to the local banking infrastructure.

9 The local equivalent, if you are  
10 familiar with the ACH system in the United States,  
11 the local rail system in the destination country  
12 is where the funds are often withdrawn to and  
13 deposited into a -- a local bank account, to the  
14 beneficiary.

15 Q. So when xRapid customers started using  
16 xRapid in 2008 -- 2018, for the first step of the  
17 process the xRapid customer would go to a  
18 originating nation exchange to convert their  
19 originating fiat currency into XRP, correct?

20 A. In the time period of 2018, I believe  
21 that is correct, yes.

22 Q. And during that time period when the  
23 xRapid customer was getting their XRP off an  
24 originating country exchange, during that time  
25 period was Ripple generating revenues from xRapid

1 or ODL?

2 MS. ZORNBERG: You're talking  
3 about 2018?

4 MR. HANAUER: Whatever the time  
5 period was when the money transmitter were  
6 getting their XRP from originating country  
7 digital exchanges.

8 MS. ZORNBERG: You can answer if  
9 you understand the question.

10 A. Can you rephrase the question, please?

11 Q. Okay. So I -- I think you described  
12 that when xRapid launched --

13 A. Yes.

14 Q. -- Step 1 in the process is the money  
15 transmitter takes -- I'll just use an example --  
16 dollars and goes onto a U.S. digital exchange and  
17 converts the dollars to XRP, right?

18 A. In that -- as an example, that's  
19 correct, yes.

20 Q. And -- and that's the way that xRapid  
21 originally worked when it was launched in 2018?

22 A. In 2018, that would be an example of how  
23 it worked, yes.

24 Q. Okay. And so it's my understanding that  
25 at a later point in time, the money transmitter

1 would get their XRP not from an exchange, but  
2 buying the XRP from Ripple?

3 MS. ZORNBERG: Objection.

4 You can -- you can answer.

5 A. So the early version of the product that  
6 -- there's a lot of earlier versions, but you're  
7 referring to the -- I believe you're referring to  
8 the 2018 version. It is correct that the customer  
9 would start with, as an example, U.S. dollars at  
10 the originating exchange and convert it into XRP.

11 We received feedback from our customers  
12 and that talked about nascent infrastructure, that  
13 the exchanges often go down. They're unreliable.  
14 And there are fees associated that the exchanges  
15 levy as well.

16 So taking that feedback, the product  
17 team came up with an idea known as Wallet Send.  
18 And Wallet Send provided the sending customer  
19 with --

20 Q. Do you mind spelling Wallet Send? I'm  
21 not sure the court reporter got the --

22 A. Wallet Send, W-A-L-L-E-T space S-E-N-D.

23 The Wallet Send, you can think of it as  
24 a -- a crypto wallet that was provided to the --  
25 the sending customer. And why that was unique was

1 that our customers had noted that while there's a  
2 lot of steps, to use xRapid I have to onboard at  
3 the sending exchange. I have to onboard at the  
4 receiving exchange. I have fees at the sending  
5 exchange. I have fees at the receiving exchange.  
6 The sending exchange may go down. The receiving  
7 exchange may go down. And so they provided a lot  
8 of this feedback to us.

9 So the product team came up with a  
10 concept called a Wallet Send. And Wallet Send  
11 essentially eliminated half -- half the leg of a  
12 payment in terms of all the infrastructure  
13 onboarding fees.

14 And so we piloted that concept for  
15 Wallet Send. Customers loved it. And so we  
16 brought that into production. And to my  
17 knowledge, the primary way that customers sourced  
18 their XRP for Wallet Send was from Ripple.

19 Q. And when did customers start using this  
20 Wallet Send feature?

21 A. I don't recall the dates exactly, but I  
22 believe sometime after 2019.

23 Q. And was the implementation of Wallet  
24 Send, was that the first time that Ripple began  
25 generating revenues from xRapid or ODL?



1           A.    I don't know for certain, but I believe  
2   so.

3           Q.    And the way Ripple generated its  
4   revenues through the Wallet Send program was by  
5   selling XRP to xRapid or ODL customers?

6                   MS. ZORNBERG:   Object to form.

7           A.    Can you repeat the question, please?

8           Q.    All right.   So the way Ripple generated  
9   revenues after it implemented Wallet Send was by  
10   selling XRP directly to the money transmitters  
11   that used xRapid or ODL?

12          A.    So to my knowledge, that was one of the  
13   ways that we generated revenue.   I mentioned there  
14   was a line of credit and there are opportunities  
15   for FX --

16          Q.    But that came later, right?

17          A.    I don't know the exact time frame, but I  
18   believe it is correct that we started with Wallet  
19   Send and -- and then, to my knowledge and  
20   recollection, pretty quickly followed on with --  
21   with line of credit.

22          Q.    And who are the Ripple customers that  
23   use xRapid or ODL?

24          A.    They are often FinTechs or -- I think  
25   they're known as MTOs.   I think MTO stands for

1 money transmission organization or mobile  
2 transmission organization. Likely money  
3 transmission organization. And there are  
4 customers, FinTechs, MTOs that have the desire for  
5 moving money cross border where costs, speed and  
6 transparency are a quarter of their value  
7 proposition.

8 Q. Has the type of customer that uses  
9 xRapid or ODL changed over time? Or has it always  
10 been money transmitters?

11 A. Are you referring to the legal  
12 definition of money transmitter or -- because  
13 there have been different customer types that we  
14 have found through product development and  
15 customer research that go beyond the classical  
16 definition of a -- a money transmitter. For  
17 example, e-commerce companies.

18 Q. Do e-commerce companies currently use  
19 ODL?

20 A. I don't know for certain the types of  
21 businesses -- to restate, I do believe that in  
22 certain cases, customers of our customers are  
23 e-commerce companies that leverage the service.

24 Q. And the cust -- the Ripple customers  
25 that use ODL or xRapid, those are money

1 transmitters, correct?

2 MS. ZORNBERG: Object to form.

3 A. I do believe at certain points, some of  
4 them were not money transmitters. They were like  
5 a marketplace, an e-commerce marketplace.

6 Q. Historically have the majority of  
7 ODL/xRapid customers been money transmitters?

8 MS. ZORNBERG: Object to form.

9 A. I believe that to be true, yes.

10 Q. Do banks use ODL for cross-border  
11 payments?

12 A. I believe there are -- I believe there  
13 is -- there are a few banks that use ODL or xRapid  
14 for cross-border payments or have in the past.

15 Q. Which ones?

16 A. I'm not familiar with the entire list,  
17 but I do remember meeting the [REDACTED] and  
18 talking to them about what they liked about that  
19 experience and what they didn't like about the  
20 experience and getting customer feedback directly  
21 from [REDACTED]

22 Q. Did that bank ever purchase the ODL or  
23 xRapid product from Ripple?

24 MS. ZORNBERG: Object. Object to  
25 form.

1 A. I don't -- I don't recall.

2 Q. Have any American banks been Ripple  
3 customers that used ODL or xRapid?

4 A. I don't recall.

5 Q. Can you name me any as you sit here  
6 today?

7 A. I don't believe so.

8 Q. So on -- I think we talked about the --  
9 when xRapid launched back in 2018, the -- the user  
10 had to go -- in the originating country had to go  
11 to an exchange, digital exchange, on the orig --  
12 in the originator country, right?

13 A. That -- I believe that to be correct.

14 Q. And in the target country, the  
15 xRapid/ODL customer has to go to an exchange in  
16 the target country to exchange the XRP into the  
17 target currency, right?

18 A. In the destination country currency,  
19 yes.

20 Q. Thank you.

21 And I know that the Step 1, the  
22 originating country process, that's changed over  
23 time. Has the fact that the receiving country --  
24 there needs to be a transaction on a receiving  
25 country XRP exchange, does that still happen?

1           A.    We are working, actively working, on a  
2   product release so that the customer experience  
3   isn't impaired when the receiving exchange goes  
4   down.

5           Q.    Has that product been released yet?

6           A.    It's part of -- I don't recall what  
7   release it's part of but it's in an upcoming  
8   release. It's -- the feature is known as Wallet  
9   Receive. So that you have Wallet Send and you  
10   would have Wallet Receive.

11          Q.    Are any -- are any current ODL/xRapid or  
12   their customers using Wallet Receive right now?

13          A.    It's not in production yet. It's in  
14   active development and it has not been released.  
15   And the plan is for all customers and partners to  
16   move to Wallet Receive because that is the -- that  
17   will deliver the kind of experience that customers  
18   expect, eliminating the dependency on both the  
19   sending exchange and the receiving exchange in  
20   terms of critical -- providing critical payment  
21   infrastructure.

22          Q.    But as of this moment and going  
23   backwards to the time that XR -- xRapid was  
24   launched, the -- the customer, the ODL/xRapid  
25   customer, has always been dependent on the



1 receiving country exchange?

2 MS. ZORNBERG: Object to form.

3 A. The very early versions of the -- the  
4 product, you know, with RPP, that wasn't the case.

5 Q. I'm talking about from the start of  
6 xRapid in 2018 to this point in time, today, the  
7 xRapid/ODL product relies on converting XRP to  
8 receiving fiat currency on a receiving country  
9 exchange.

10 A. I do believe that to be true, but I'm  
11 not a hundred percent certain if an early version  
12 of Wallet Receive is available in certain  
13 countries. So there may be exceptions where we  
14 have deployed an early version of Wallet Receive.  
15 But I don't know for certainty now.

16 Q. And so when in xRapid -- can I just  
17 settle on one, either ODL or xRapid, to -- to save  
18 some words?

19 A. Yeah.

20 Q. Do you have a pref -- do you have a  
21 preference?

22 A. I like ODL.

23 Q. Okay. So when I'm referring to ODL, I'm  
24 referring to ODL and its predecessor xRapid.

25 Do you understand?

1 A. Yeah, I understand that.

2 Q. Okay. So when the ODL user relies on an  
3 exchange to transmit the currency, there are costs  
4 associated with converting the XRP -- or  
5 converting the XRP to the fiat currency on the  
6 receiving exchange, correct?

7 A. I believe so, yes.

8 Q. There's a spread, right?

9 MS. ZORNBERG: Object to form.

10 A. There are a few different costs. One --  
11 to be clear, like, a spread is always -- sorry. A  
12 spread is there regardless. So if you're  
13 converting from U.S. dollars to Mexican pesos,  
14 you're going to be hit with a -- a spread. But  
15 that is one component of the cost.

16 The other component would be any fees  
17 that the exchange levy on -- with trades or  
18 withdrawals. And withdrawals are when you take  
19 the local currency and you take it off the  
20 exchange onto local rails.

21 Q. So what incentives did Ripple provide to  
22 its ODL customers to use ODL in light of the  
23 spreads and the fees that you just described?

24 MR. HECKER: Objection to form.

25 A. Can you rephrase the question, please?

1 Q. Yeah. So you talked about spreads and  
2 fees that are incurred when ODL converts XRP to  
3 receiving fiat, right?

4 A. Yes, that's correct.

5 Q. What incentives did Ripple provide its  
6 ODL customers to address those spreads and fees  
7 that would be incurred converting XRP to receiving  
8 fiat?

9 A. At different phases of the product, that  
10 changed. One piece of feedback we were hearing  
11 from our customers was that reliability, not only  
12 of the technical infrastructure but the rate that  
13 you would get from the product, is super important  
14 to their customers, especially like remittance  
15 customers, where often -- often immigrants sending  
16 money back home shop the rate around to get the  
17 best rates. So even a few basis points makes a  
18 big difference.

19 And customers provide that feedback to  
20 us. Even though cryptocurrency is volatile, the  
21 product needs to function such that if I'm sending  
22 money from -- if my customers are sending money  
23 from the UK to the Filipino peso, it has to be  
24 reliable. Otherwise, they'll go to another  
25 offering.

1           So the customers are very price  
2     sensitive to FX.

3           And -- and through the evolution of the  
4     product, we wanted to ensure that they had a  
5     reliable FX experience. And so -- early version  
6     of the product, the delta between what the market  
7     rate was between GBP and Philippines, just as an  
8     example, and what they were getting out of the  
9     product experience from xRapid, given the volatile  
10    nature of cryptocurrency, is that sometimes was  
11    cheaper and sometimes was more expensive.  
12    Sometimes was on par. But our customers wanted  
13    something that was consistent on par with local  
14    FX.

15           And so early on in the product, the  
16    easiest way to do that while we could still get  
17    market feedback was to make the customer whole for  
18    the delta between the on par FX rate and what they  
19    were receiving in the product if it was more  
20    expensive than the market rate.

21           But as I mentioned, sometimes it was  
22    cheaper. And that became early sort of indicators  
23    that there might be opportunities to take revenue  
24    in those cases as well.

25           Q.    So --

1           A.    So in early versions of the product, the  
2   fastest way to do that was to make them whole.  
3   And then later on in the product, we started to  
4   create a feature so the customers didn't have to  
5   worry about that at all. So it was baked into the  
6   product, as we call it.

7           Q.    And -- and when you said "make whole,"  
8   Ripple would actually provide rebates to its ODL  
9   customers to account for the spread on the XRP  
10   conversion to receiving fiat being above the  
11   prevailing FX rate?

12          A.    I think the right way to think about it  
13   is you take the rate that they would get from the  
14   market for converting, I think -- let's just  
15   continue with the example -- from GBP to the  
16   Philippines. You can call that the Reuters rate  
17   or the FX rate. And then you take the rate that  
18   the xRapid or -- sorry, ODL product provides to go  
19   from GBP to Filipino peso with XRP as the bridge.

20               And if there is a net positive delta,  
21   then that is -- we make them whole on that net  
22   positive delta. If it's on par, nothing, if it's  
23   a negative. And that was an early indication that  
24   there was opportunity for Ripple to take revenue.

25          Q.    Right. And when you say "make whole,"



1     you mean that Ripple would actually pay the ODL  
2     customer the difference between the rate the ODL  
3     customer obtained using ODL and the rate the ODL  
4     customer would have obtained on an FX exchange?

5                     MR. HECKER:  Objection to form.

6             A.    I -- I don't know what the right  
7     terminology we used.  Actually, do you mind  
8     repeating the question or statement?

9             Q.    You talked about the -- making the  
10    customer whole, right?

11            A.    Correct.

12            Q.    And so if the customer paid more using  
13    ODL than they would have in the inner bank FX  
14    markets, Ripple would pay the ODL customer the  
15    difference between the ODL rate and the inner bank  
16    FX rate?

17            A.    I believe that to be true, yes.

18            Q.    And did Ripple also pay volume  
19    incentives to its ODL customers?

20            A.    I don't know for certain about the  
21    "also," but as I mentioned earlier, especially  
22    with early adopters into new corridors that were  
23    nascent, I believe we provided volume incentives,  
24    especially early on in the product life cycle, to  
25    make up for some of the product experience gaps